· Reply to Office Action of May 17, 2005

Inventor: Richter et al

Attorney Docket No.: 55564.080303

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior revisions, and listings, of claims in the application.

Listing of Claims:

1. (Currently amended) A computer-implemented mapping method of classifying a plurality of informational items in an information retrieval system, the method comprising the

steps of:

detecting an access of a first informational item;

detecting an access of a second informational item;

establishing that a relationship link exists between said first informational item

and said second informational item;

determining an interger-value non-probabilistic weight based on the historical

frequency of said relationship link; and

applying an ensemble of clustering algorithms directly proportional to said non-

probablistic integer-value weight of said relationship link.

2. (Original) The method as recited in claim 1 wherein said step of detecting the

second informational item includes the detecting of a plurality of informational items.

3. (Canceled)

4. (Currently amended) The method as recited in claim 2, further comprising the

step of:

applying an algorithm for data aging wherein the usage of the relationship

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link is monitored and used as feed back for the integer-value weight associated with the relationship link.

5. (Currently Amended) The method as recited in claim 4, further comprising the

step of:

applying a pruning algorithm wherein external information regarding the

usefulness of at least one relationship link is utilized to modify the integer-value weight

or existence of a recorded relationship link.

6. (Previously Presented) The method as recited in claim 5, wherein said pruning

algorithm performs the removal of irrelevant relationship links subsequent to the data aging

feedback process.

7. (Original) The method as recited in claim 5, wherein said pruning algorithm

makes use of a user determined feedback of the usefulness of a relationship link.

8. (Original) The method as recited in claim 2, wherein said ensemble includes a

plurality of algorithms and wherein said relationship link is weighted in direct proportion to the

number of algorithms within said ensemble of algorithms that determine the existence of said

relationship link.

9. (Original) The method as recited in claim 2, wherein said relationship link is

positioned in a list in direct proportion to the degree of consensus among said ensemble of

algorithms.

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10. (Original) The method as recited in claim 2, wherein said ensemble includes a

plurality of algorithms and wherein each algorithm within said ensemble of algorithms runs

independently of all other algorithms.

11. (Original) The method as recited in claim 2, further comprising the step of

merging the outputs of said ensemble of algorithms.

12. (Currently Amended) The method as recited in claim 2, further comprising the

step of recording said relationship link in a non-probabilistic Bayesian-type network.

13. (Canceled)

14. (Previously Presented) An apparatus for providing classification of informational

items in an information retrieval system comprising:

means for detecting the access of informational items;

means for applying an ensemble of clustering algorithms to the accessed

informational items;

means for establishing the existence of relationship links between said

informational items to enhance the effectiveness of said system; and

means for weighting said relationship links, said weight being directly

proportional to the outcome of said ensemble of algorithms.

15. (Previously Presented) The apparatus of claim 14 including:

means for aging said relationship links; and

means for pruning said relationship links.

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(Previously Presented) The apparatus of claim 15 including means for merging 16.

the resulting output of said ensemble of algorithms into a non-probabilistic network.

17. (Original) A computer readable storage medium having stored thereon a computer

program for implementing a method of classifying a plurality of information items in an

information retrieval system, said computer program comprising a set of instructions for

implementing the steps recited in claim 2.

18. (Previously Presented) The computer readable storage medium according to claim

17, wherein said computer program further comprises one or more instructions for clustering the

resulting output of said ensemble of algorithms into a non-probabilistic network.

19. (Original) The computer readable storage medium according to claim 17, wherein

said computer program further comprises one or more instructions for improving the usefulness

of said relationship links through weighting of said relationship links.

20. (Original) The computer readable storage medium according to claim 17, wherein

said computer program further comprises one or more instructions for improving the usefulness

of said relationship links through pruning of said relationship links.

21. (Original) The computer readable storage medium according to claim 17, wherein

said computer program further comprises one or more instructions for improving the usefulness

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of said relationship links through aging of said relationship links.

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(Original) The computer readable storage medium according to claim 17, wherein 22.

said computer program further comprises one or more instructions for improving the usefulness

of said relationship links through weighting, pruning and aging of said relationship links.

(Previously Presented) A method for retrieving help information in a computer 23.

network system where informational items are not fixedly mapped to one another comprising the

steps of:

determining an efficient path to arrive at a particular help item of interest; and

storing a context in which a help item is sought as well as the path to said help

item so that said context and path are available when said computer network system is

accessed by any subsequent user.

(Original) The method as recited in claim 23, further comprising the step of 24.

reexamining and dynamically changing said efficient path to a particular help item upon

subsequent help item searches or retrieval.

(Original) The method as recited in claim 23, wherein said efficient path is 25.

determined based on said context in which said help item was sought.

(Cancelled) 26.

(Previously Presented) The method as recited in claim 4, wherein said algorithm 27.

for data aging runs as a function of traffic load to age the relationship links according to

relevance of the relationship links.

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28. (New) A computer-implemented mapping method of classifying a plurality of informational items in an information retrieval system, the method_comprising the steps of:

detecting an access of a first informational item;

detecting an access of a second informational item;

establishing that a relationship link exists between said first informational item and said second informational item;

determining an interger-value weight based on the historical frequency of said relationship link; and

applying an ensemble of clustering algorithms directly proportional to said integer-value weight of said relationship link;

combining and merging the output of said ensemble of clustering algorithms to pre-populate the informational retrieval system wherein the informational retrieval system may be a Baysean or a non-Baysean system.

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